# Discussion of The Dynamics of Seller Reputation: Evidence from eBay

Chris Dellarocas
University of Maryland



## Main empirical findings

- Incidence of negative feedback reduces a seller's sales growth rate
- Incidence of a negative feedback increases the rate of subsequent negative feedback
- Just before exiting, sellers receive more negative feedback than their entire lifetime average
- A typical seller starts his career as a buyer

## "Negatives beget more negatives"

- Very interesting empirical finding
- Is it "slacking" or "stoning"?
- Good theoretical arguments exist for both explanations
- Khopkar, Li and Resnick (2005) find stronger evidence for stoning than slacking
- Is it possible to rigorously distinguish?
- Is it possible that both phenomena take place?
- What about a third explanation: that of a "grace period"?
  - Buyers are reluctant to give negative before anybody else, then revert to "normal" behavior once somebody does

## Negative feedback and exit

- Direction of causality is unclear
  - Sellers decide to milk their reputation and exit, thus accumulate lots of negative feedback before exiting

#### OR

- Sellers have a spell of "bad luck", get discouraged (or decide that they are better off acquiring a new identity) and exit
- Authors focus on first interpretation
- Khopkar, Li and Resnick (2005) focus on second interpretation
- Is it possible to tell between the two?

## Empirical assumptions

- "Rate of feedback submission is constant"
  - ➤ Khophar et al. (2005) find that rate of feedback decreases after a negative and that rate of feedback decreases for sellers with very high scores
  - Dellarocas, Fan and Wood (2003) find that rate of feedback increases then decreases as a trader's score increases
- Not clear if authors account for transactions without any feedback
  - "Silence" carries information too esp. since fear of retaliation may discourage dissatisfied traders from speaking up

### Theoretical models

- Pure moral hazard
- Pure adverse selection
- Hybrid models
- In all models probability of good outcomes declines after negative ratings
- But what about models where negative ratings cause the seller to improve?
  - Learning from one's mistakes", experimentation models
  - I feel a little uncomfortable if there is no learning on eBay, at least for some sellers...
  - Is it possible that these phenomena co-exist with "stoning" and "slacking" and give rise to the observed empirical patterns?

## In summary...

- Fascinating findings, no clear theoretical conclusions despite thorough consideration of alternative hypotheses by authors
- One hypothesis not considered by authors:
  - Market is heterogeneous
  - Different models characterize different population segments
  - ➤ Is it possible to identify models/segments?
- Lessons learned:
  - Empirical research in electronic markets promising but also challenging
  - Easy to find **population-level** correlations, difficult to make **individual-level** inferences
  - Need methodologies that can deal with heterogeneity
    - □ Mixture-models?
    - □ Controlled experiments?